

Serial Number: 09202, 681A

ENTERED

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: _____
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
- ☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically: _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☒ Other: Authorized edit: Sequence #14, changed length
from 34 to 31 nucleotides.

*Examiner: ~~The~~ above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95

1652

RAW SEQUENCE LISTING DATE: 10/11/2000
 PATENT APPLICATION: US/09/202,681A TIME: 16:29:36

Input Set : A:\Cpg.pto
 Output Set: N:\CRF3\10112000\I202681A.raw

SEQUENCE LISTING

1 (i) GENERAL INFORMATION:
 2 (i) APPLICANT: Recombinant Biocatalysis, Inc.
 3 (ii) TITLE OF INVENTION: THERMOSTABLE PHOSPHATASES
 4 (iii) NUMBER OF SEQUENCES: 64
 5 (iv) CORRESPONDENCE ADDRESS:
 6 (A) ADDRESSEE: Fish & Richardson P.C.
 7 (B) STREET: 4225 Executive Square, Suite 1400
 8 (C) CITY: La Jolla
 9 (D) STATE: CA
 10 (E) COUNTRY: USA
 11 (F) ZIP: 92037
 12 (v) COMPUTER READABLE FORM:
 13 (A) MEDIUM TYPE: Diskette
 14 (B) COMPUTER: IBM Compatible
 15 (C) OPERATING SYSTEM: Windows 95
 16 (D) SOFTWARE: FastSEQ for Windows Version 2.0b
 17 (vi) CURRENT APPLICATION DATA:
 18 (A) APPLICATION NUMBER: US/09/202,681A
 19 (B) FILING DATE: 23-Dec-1999
 20 (C) CLASSIFICATION:
 21 (vii) PRIOR APPLICATION DATA:
 22 (A) APPLICATION NUMBER: 08/666,867
 23 (B) FILING DATE: 19-JUN-1996
 24 (A) APPLICATION NUMBER: 50/033,762
 25 (B) FILING DATE: 19-JUN-1997
 26 (viii) ATTORNEY/AGENT INFORMATION:
 27 (A) NAME: Haile, Ph.D., Lisa A.
 28 (B) REGISTRATION NUMBER: 38,347
 29 (C) REFERENCE/DOCKET NUMBER: 09010/015801
 30 (ix) TELECOMMUNICATION INFORMATION:
 31 (A) TELEPHONE: 619/678-5070
 32 (B) TELEFAX: 619/678-5099
 33 (C) TELEX:
 34 (x) INFORMATION FOR SEQ ID NO: 1:
 35 (i) SEQUENCE CHARACTERISTICS:
 36 (A) LENGTH: 52 base pairs
 37 (B) TYPE: nucleic acid
 38 (C) STRANDEDNESS: single
 39 (D) TOPOLOGY: linear
 40 (ii) MOLECULE TYPE: cDNA
 41 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
 42 CCGAGATTC AITAAAGAGG AGA/ATTAAC IATGGGGGCA GGTCCGAAAA GG 52
 43 (ii) INFORMATION FOR SEQ ID NO: 2:
 44 (i) SEQUENCE CHARACTERISTICS:
 45 (A) LENGTH: 31 base pairs
 46 (B) TYPE: nucleic acid

RAW SEQUENCE LISTING

DATE: 10/11/2000

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67      (C) STRANDEDNESS: single
68      (D) TOPOLOGY: linear
69      (ii) MOLECULE TYPE: cDNA
70      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
71      CCGAGGATCC TCACCGGCGG CCGCGGGTC G
72      (2) INFORMATION FOR SEQ ID NO: 3:
73      (i) SEQUENCE CHARACTERISTICS:
74      (A) LENGTH: 32 base pairs
75      (B) TYPE: nucleic acid
76      (C) STRANDEDNESS: single
77      (D) TOPOLOGY: linear
78      (ii) MOLECULE TYPE: cDNA
79      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
80      CCGAGGATCC TCACCGGCGG CCGCGGGTC G
81      (2) INFORMATION FOR SEQ ID NO: 4:
82      (i) SEQUENCE CHARACTERISTICS:
83      (A) LENGTH: 22 base pairs
84      (B) TYPE: nucleic acid
85      (C) STRANDEDNESS: single
86      (D) TOPOLOGY: linear
87      (ii) MOLECULE TYPE: cDNA
88      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
89      CCGAGGATCC TCATTTTAA ACCAAATGT CC
90      (2) INFORMATION FOR SEQ ID NO: 5:
91      (i) SEQUENCE CHARACTERISTICS:
92      (A) LENGTH: 32 base pairs
93      (B) TYPE: nucleic acid
94      (C) STRANDEDNESS: single
95      (D) TOPOLOGY: linear
96      (ii) MOLECULE TYPE: cDNA
97      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
98      CCGAGGATCC TCATTTTAA ACCAAATGT CC
99      (2) INFORMATION FOR SEQ ID NO: 6:
100      (i) SEQUENCE CHARACTERISTICS:
101      (A) LENGTH: 32 base pairs
102      (B) TYPE: nucleic acid
103      (C) STRANDEDNESS: single
104      (D) TOPOLOGY: linear
105      (ii) MOLECULE TYPE: cDNA
106      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
107      CCGAGGATCC TCATTTTAA ACCAAATGT CC
108      (2) INFORMATION FOR SEQ ID NO: 7:
109      (i) SEQUENCE CHARACTERISTICS:
110      (A) LENGTH: 31 base pairs
111      (B) TYPE: nucleic acid
112      (C) STRANDEDNESS: single
113      (D) TOPOLOGY: linear
114      (ii) MOLECULE TYPE: cDNA
115      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
116      CCGAGGATCC TCATTTTAA ACCAAATGT CC
117      (2) INFORMATION FOR SEQ ID NO: 8:
118      (i) SEQUENCE CHARACTERISTICS:
119      (A) LENGTH: 52 base pairs
120      (B) TYPE: nucleic acid
121      (C) STRANDEDNESS: single
122      (D) TOPOLOGY: linear
123      (ii) MOLECULE TYPE: cDNA
124      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
125      CCGAGGATCC TCATTTTAA ACCAAATGT CC
126      (2) INFORMATION FOR SEQ ID NO: 9:
127      (i) SEQUENCE CHARACTERISTICS:
128      (A) LENGTH: 52 base pairs
129      (B) TYPE: nucleic acid
130      (C) STRANDEDNESS: single
131      (D) TOPOLOGY: linear
132      (ii) MOLECULE TYPE: cDNA
133      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:

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PAW SEQUENCE LISTING DATE: 10/11/2000
 PATENT APPLICATION: US/09/202,681A TIME: 16:29:36

Input Set : Ar\Cpg.pto
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144 CCGACCAATTG ATTAAAGAGG AGAAATTAA ATGAGGAGCC CTTACAATAA AC      52
145 (2) INFORMATION FOR SEQ ID NO: 8:
146 (1) SEQUENCE CHARACTERISTICS:
147 (A) LENGTH: 31 base pairs
148 (B) TYPE: nucleic acid
149 (C) STRANDEDNESS: single
150 (D) TOPOLOGY: linear
151 (11) MOLECULE TYPE: cDNA
152 (12) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
153 CCGAGGATTC ATACACCCAC AGAAGCTTAA C      31
154 (2) INFORMATION FOR SEQ ID NO: 9:
155 (1) SEQUENCE CHARACTERISTICS:
156 (A) LENGTH: 52 base pairs
157 (B) TYPE: nucleic acid
158 (C) STRANDEDNESS: single
159 (D) TOPOLOGY: linear
160 (11) MOLECULE TYPE: cDNA
161 (12) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
162 CCGAGGATTC ATTAAAGAGG AGAAATTAA ATGAGGAGGA AAGTCTCTTC TT      52
163 (2) INFORMATION FOR SEQ ID NO: 10:
164 (1) SEQUENCE CHARACTERISTICS:
165 (A) LENGTH: 31 base pairs
166 (B) TYPE: nucleic acid
167 (C) STRANDEDNESS: single
168 (D) TOPOLOGY: linear
169 (11) MOLECULE TYPE: cDNA
170 (12) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
171 CCGAGGATTC TCAGGCTTC TCGAGAAATCA A      31
172 (2) INFORMATION FOR SEQ ID NO: 11:
173 (1) SEQUENCE CHARACTERISTICS:
174 (A) LENGTH: 52 base pairs
175 (B) TYPE: nucleic acid
176 (C) STRANDEDNESS: single
177 (D) TOPOLOGY: linear
178 (11) MOLECULE TYPE: cDNA
179 (12) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
180 CCGAGGATTC ATTAAAGAGG AGAAATTAA ATGAGGAGGA AATATGCGCG CT      52
181 (2) INFORMATION FOR SEQ ID NO: 12:
182 (1) SEQUENCE CHARACTERISTICS:
183 (A) LENGTH: 34 base pairs
184 (B) TYPE: nucleic acid
185 (C) STRANDEDNESS: single
186 (D) TOPOLOGY: linear
187 (11) MOLECULE TYPE: cDNA
188 (12) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
189 CCGAGGATTC TTAAGGCTTC TCGAGGTGGG GGTG      34
190 (2) INFORMATION FOR SEQ ID NO: 13:
191 (1) SEQUENCE CHARACTERISTICS:
192 (A) LENGTH: 54 base pairs

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RAW SEQUENCE LISTING

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TIME: 10:29:36

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220         (B) TYPE: nucleic acid
221         (C) STRANDEDNESS: single
222         (D) TOPOLOGY: linear
223         (ii) MOLECULE TYPE: cDNA
224         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
225 CCGAGCAATG ATTAAGAGG AGAATTA C TAATATAAA TCGATTATG AAGG      34
226 (2) INFORMATION FOR SEQ ID NO: 13:
227 (i) SEQUENCE CHARACTERISTICS:
228 (A) LENGTH: 41 base pairs
229 (B) TYPE: nucleic acid
230 (C) STRANDEDNESS: single
231 (D) TOPOLOGY: linear
232 (ii) MOLECULE TYPE: cDNA
233 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:
234 CCGAGCAATG AACATAGCT AAGCAATTG C      31
235 (2) INFORMATION FOR SEQ ID NO: 14:
236 (i) SEQUENCE CHARACTERISTICS:
237 (A) LENGTH: 32 base pairs
238 (B) TYPE: nucleic acid
239 (C) STRANDEDNESS: single
240 (D) TOPOLOGY: linear
241 (ii) MOLECULE TYPE: cDNA
242 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:
243 CCGAGCAATG ATTAAGAGG AGAATTAAC TAAGAGGATC CTCCTGACCA AC      52
244 (2) INFORMATION FOR SEQ ID NO: 16:
245 (i) SEQUENCE CHARACTERISTICS:
246 (A) LENGTH: 31 base pairs
247 (B) TYPE: nucleic acid
248 (C) STRANDEDNESS: single
249 (D) TOPOLOGY: linear
250 (ii) MOLECULE TYPE: cDNA
251 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:
252 CCGAGCAATG TCACAGGCTC AGAAGCCTT G      31
253 (2) INFORMATION FOR SEQ ID NO: 17:
254 (i) SEQUENCE CHARACTERISTICS:
255 (A) LENGTH: 34 base pairs
256 (B) TYPE: nucleic acid
257 (C) STRANDEDNESS: single
258 (D) TOPOLOGY: linear
259 (ii) MOLECULE TYPE: Genomic DNA
260 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:
261 CCGAGCAATG ATTAAGAGG AGAATTAAC TAAGAGGAAAC TTAAGAAAGT ACCT      54
262 (2) INFORMATION FOR SEQ ID NO: 18:
263 (i) SEQUENCE CHARACTERISTICS:
264 (A) LENGTH: 31 base pairs
265 (B) TYPE: nucleic acid
266 (C) STRANDEDNESS: single
267 (D) TOPOLOGY: linear
268 (ii) MOLECULE TYPE: cDNA

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RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/202,681A

DATE: 10/11/2008
 TIME: 10:29:36

Input Set : A:\Cpg.pto
 Output Set: N:\CRF3\10112000\I202681A.raw

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296 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:
298 CCGAGGATCC TCACCGCCGC CTCGGGGTCC C
300 (i) INFORMATION FOR SEQ ID NO: 19:
301 (1) SEQUENCE CHARACTERISTICS:
302 (A) LENGTH: 183 base pairs
303 (B) TYPE: nucleic acid
304 (C) STRANDEDNESS: single
305 (D) TOPOLOGY: linear
306 (ii) MOLECULE TYPE: Genomic DNA
307 (ix) FEATURE:
308 (1) NAME/KEY: Coding Sequence
309 (8) LOCATION: 1..1780
310 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:
311 ATG AGG GCG ACC GGA GTG CCG ATA ATT CTC ACC AAC GGT GAG GGC ATC
312 Met Arg Gly Ser Gly Val Arg Ile Leu Leu Thr Asn Asp Asp Gly Ile
313 1 5 10 15
314 TTT GGC GAG GGT CTG GGG GGT CTG CCG AAG ATG CTG GAG CCC GTG GCT
315 Phe Ala Glu Gly Leu Gly Ala Leu Arg Lys Met Leu Glu Pro Val Ala
316 20 25 30
317 ACC CTT TAC GTG GTG GCT CCG GAC CGA GAG CCG ACC GCG GCG AGC GAT
318 Thr Leu Tyr Val Val Ala Pro Asp Arg Glu Arg Ser Ala Ala Ser His
319 35 40 45
320 GGT ATC ACC GTT CAC CGT CCG CTG CCG GTG CCG GAG GCG GAT TTT CCG
321 Ala Ile Thr Val His Arg Pro Leu Arg Val Arg Glu Ala Gly Phe Arg
322 50 55 60
323 AGC CCC AAG CTT AAA GGT TGG GTA GTG GAC CCG ACC CCG GCG GAC CCG
324 Ser Pro Arg Leu Lys Gly Trp Val Val Asp Gly Thr Pro Ala Asp Lys
325 65 70 75 80
326 GTC AAG CTG GGC ATG GAG GTA CTT TTG CCG GAA CGT CCA GAT TTC CTG
327 Val Lys Leu Gly Leu Glu Val Leu Leu Pro Glu Arg Pro Asp Phe Leu
328 85 90 95
329 GAT TCG GGC ATA AAC TAC GGG CCC AAC CCG GAT ACC GAC GGA CTT TAC
330 Val Ser Gly Ile Asn Tyr Gly Pro Asn Leu Gly Thr Asp Val Leu Tyr
331 100 105 110
332 TCC GGC ACC GTC TCG GCG GCC ATA GAA GGG GGA ATT AAC GCG ATT CCG
333 Ser Gly Thr Val Ser Ala Ala Ile Glu Gly Val Ile Asn Gly Ile Pro
334 115 120 125
335 TCG GTG GCG GTA TCT TTG GCC ACG CCG CCG GAG CCG GAC TAT ACC TGG
336 Ser Val Ala Val Ser Leu Ala Thr Arg Arg Glu Pro Asp Tyr Thr Trp
337 130 135 140
338 CCG CCG CCG TTC GTC CTG GTC CTG CTG GAG GAA CTG CGA AAA CAC GAA
339 Ala Ala Arg Phe Val Leu Val Leu Leu Glu Glu Leu Arg Lys His Gln
340 145 150 155 160
341 CTS CCC GCA GGA ACC CTG CTC AAC GTC AAC GTC CCC GAC GAG GTG CCC
342 Leu Pro Pro Gly Thr Leu Leu Asn Val Asn Val Pro Asp Gly Val Pro
343 165 170 175
344 GCG GGG GTC AAG GTG ACC AAA CTG GGA AGC GTA CCG TAC GTC AAC GTG
345 Arg Gly Val Lys Val Thr Lys Leu Gly Ser Val Arg Tyr Val Asn Val
346 180 185 190

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VERIFICATION SUMMARY

DATE: 10/11/2000

PATENT APPLICATION: US/09/202,681A

TIME: 16:29:37

Input Set : Ar\Cpg.pto

Output Set: Nr\CRF3\10112000\I202681A.raw

L:27 M:220 C: Keyword misspelled or invalid format. [(A) APPLICATION NUMBER:]
L:28 M:220 C: Keyword misspelled or invalid format. [(B) FILING DATE:]